Application No.: 10/077,654 Attorney Docket No.: UTL 00161

## AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listing, of claims in the application:

## **Listing of Claims:**

1-22. (Cancelled).

23. (New) A tunable isolator circuit comprising:

an isolator formed on a substrate and having a input port, an output port and an isolation port;

an isolation port matching circuit formed on the substrate and connected to the isolation port, the isolation port matching circuit comprising a first ferro-electric (FE) tunable component and configured to provide natural impedance matching to a first component impedance of a first electrical component connected to the isolation port;

an output port matching circuit formed on the substrate and connected to the output port, the output port matching circuit comprising a second ferroelectric (FE) tunable component and configured to provide natural impedance matching to a second component impedance of a second electrical component connected to the output port; and

a input port matching circuit formed on the substrate and connected to the input port, the input port matching circuit configured to provide natural impedance matching to a third component impedance of a third electrical component connected to the input port, the input port matching circuit comprising a third ferro-electric (FE) tunable component and a micro-electrical-mechanical switch configured to connect an impedance component to the ferro-electric (FE) tunable component when activated, wherein the first ferro-electric (FE) tunable component, second ferro-electric (FE) tunable component, and the micro-electrical-mechanical switch are adjustable during operation of the tunable isolator circuit to tune a frequency of operation of the tunable isolator circuit from within a

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personal communications services (PCS) frequency band to within another PCS frequency band.

- 24. (New) The tunable isolator circuit of claim 23, wherein at least one of the first ferro-electric (FE) tunable component, second ferro-electric (FE) tunable component, and third ferro-electric (FE) tunable component comprises ferro-electric tunable capacitor having an adjustable capacitance.
- 25. (New) The tunable isolator circuit of claim 23, wherein the second electrical component is an antenna and the third electronic component is a power amplifier.
- 26. (New) The tunable isolator circuit of claim 25, further comprising a duplexer connected between the antenna and the output port and wherein the output matching circuit matches from about 12.5 ohms at the isolator output port to about 12.5 ohms at a duplexer input port.
- (New) The tunable isolator circuit of claim 23, further comprising a control line connected to at least one of the ferro-electric tunable components.
- 28. (New) The tunable isolator circuit of claim 27, further comprising a control source electrically coupled to the control line and configured to transmit a control signal on the control line, the at least one of the ferro-electric tunable components responsive to the control signal during the operation of the tunable isolator circuit.
- 29. (New) The tunable isolator circuit of claim 23, wherein the PCS frequency band is an India PCS frequency band including a 1900 megahertz frequency and the another PCS frequency band is a United States PCS frequency band including a 800 megahertz frequency.
  - (New) A tunable isolator circuit comprising:
     an isolator formed on a substrate and having a input port, an output

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an isolation port matching circuit formed on the substrate, and connected to the isolation port, the isolation port matching circuit comprising a first ferro-electric (FE) tunable component and configured to provide natural impedance matching to a component impedance of an electrical component connected to the isolation port;

an output port matching circuit formed on the substrate and

connected to the output port, the output port matching circuit comprising a second ferroelectric (FE) tunable component and configured to provide natural impedance matching to a power amplifier impedance of a power amplifier connected to the output port;

a input port matching circuit formed on the substrate and connected to the input port, the input port matching circuit configured to provide natural impedance matching to an antenna circuit impedance of an antenna circuit connected to the input port, the input port matching circuit comprising a third ferro-electric (FE) tunable component and a micro-electrical-mechanical switch configured to connect an impedance component to the ferro-electric (FE) tunable component when activated; and

a control line connected to at least one of the matching circuits and

configured to receive a control signal, wherein at least one of the first ferro-electric (FE) tunable component, second ferro-electric (FE) tunable component, third ferro-electric (FE) tunable component, and the micro-electrical-mechanical switch is responsive to the control signal during operation of the tunable isolator circuit to tune a frequency of operation of the tunable isolator circuit from within a personal communications services (PCS) frequency band to within another PCS frequency band.